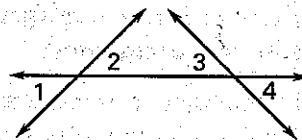


LESSON
2.7**Practice B** *continued*
For use with pages 122–131**Give a reason for each step of the proof.****15. GIVEN:** $\angle 2 \cong \angle 3$ **PROVE:** $\angle 1 \cong \angle 4$ **Statements****Reasons**1. $\angle 2 \cong \angle 3$

1. ?

2. $\angle 3 \cong \angle 4$

2. ?

3. $\angle 2 \cong \angle 4$

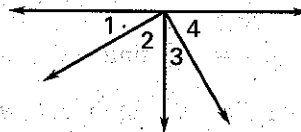
3. ?

4. $\angle 1 \cong \angle 2$

4. ?

5. $\angle 1 \cong \angle 4$

5. ?

16. GIVEN: $\angle 1$ and $\angle 2$ are complementary.
 $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$ **PROVE:** $\angle 3$ and $\angle 4$ are complementary.**Statements****Reasons**1. $\angle 1$ and $\angle 2$ are complementary.

1. ?

2. $m\angle 1 + m\angle 2 = 90^\circ$

2. ?

3. $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$

3. ?

4. $m\angle 1 = m\angle 3$, $m\angle 2 = m\angle 4$

4. ?

5. $m\angle 3 + m\angle 2 = 90^\circ$

5. ?

6. $m\angle 3 + m\angle 4 = 90^\circ$

6. ?

7. $\angle 3$ and $\angle 4$ are complementary.

7. ?

In the diagram, $\angle 1$ is a right angle and $m\angle 6 = 36^\circ$. Complete the statement with $<$, $>$, or $=$.17. $m\angle 6 + m\angle 7$? $m\angle 4 + m\angle 5$ 18. $m\angle 6 + m\angle 8$? $m\angle 2 + m\angle 3$ 19. $m\angle 9$? $3(m\angle 6)$ 20. $m\angle 2 + m\angle 3$? $m\angle 1$ 